

Paragraph 0058, penultimate line, change "124" to --128--.

Paragraph 0065, last line, change "194" to --198--.

Paragraph 0066, first line, change "202" to --203--.

Paragraph 0066, line 5, change "202" to --200--.

Paragraph 0066, penultimate line, change "192" to --203--.

REMARKS

EMAIL

Signed at Shelton, County of Mason, State of Washington, this 20th day of
August, 2003.

Respectfully submitted,

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EXHIBIT "A"
STEVEN C. SIMS
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29 MAY 2001

VERSION SPECIFICATION PARAGRAPHS 0035, 0042, 0043, 0045, 0051,
0058, 0065 AND 0066 WITH MARKINGS TO SHOW CHANGES MADE

[0035] The butt plate 30 of accessory 24 has a flat base 46 which fits against the butt end 26 of gunstock 28, an integral side wall 49 extending around the periphery of base 48 and oriented at a right angle to that element, and a rim 50 which is integral with side wall 40 49 and extends around the periphery of the side wall at the edge thereof opposite the base.

[0042] The stems 68 and 70 of decay pattern modifiers 34 and 36 are then attached by the adhesive on the exposed sides of tabs 38 and 40. With the components 34 and 36 of accessory 24 assembled to butt plate 30, the heads 64 65 and 66 of those components fit in recesses 80 and 82. These recesses are formed in elastomeric accessory component 32 and open onto the surface 84 of that component.

[0043] The stems 68 and 70 of vibration decay pattern modifiers 34 and 36 can vibrate in directions generally normal to their longitudinal axes 80 and 82 (see arrows 85a and 85b, FIG. 3A) in any and all directions around the circumferences of the stems. At the same time, the peripheral edges 89 and 90 of decay pattern modifiers 34 and 36 can vibrate at loci around the circumferences of decay pattern modifier heads ~~84 and 86~~ 65 and 66 in directions generally paralleling axis 86 and 88 (see arrows 90a and 90b, FIG. 3A). These several degrees of freedom of movement materially contribute to the effectiveness of accessory 24 in modifying the decay pattern of the shock vibration set up when gun 22 is fired as does the material from which the decay pattern modifiers are fabricated.

[0045] Accessory 24 is assembled by first adhesively attaching shock vibration decay pattern modifiers 34 and 36 to accessory base plate 30 as described above. Next, the elastomeric pad component 32 of accessory 24 is assembled to base plate 30 with ledge 53 of the latter resting on rim 50 of the base plate, element 50 of the pad fitted in and surrounded by, side wall 52 of the base plate, the decay pattern modifying components 34 and 36 extending into elastomeric pad cavities 72 and 74, and the peripheral portions of the pad 32 and base plate 30 bonded together around their peripheral edges 93 89 and 90 by adhesive 92 (see FIG. 3). With this step completed, wall 46 of base plate 30 seals and isolates cavities 80 and 82.

[0051] A second recoil reducing accessory for firearms is depicted in FIGS. 6-9 and identified by reference character 120. Like the accessory 24 described above, recoil reducer 120 has a rigid butt plate, an elastomeric pad, and mushroom-shaped, shock vibration decay pattern modifiers. This accessory is fixed to the butt end 122 of gunstock 124 by threaded fasteners. The butt plate is identified by reference character 126, the elastomeric pad by reference character 128, the shock vibration decay pattern modifiers by reference characters 130 and 132, and the threaded fasteners by reference characters 134 and 136.

[0058] The holes in gunstock 124 into which the fasteners are threaded are identified by reference characters 162 and 164. As shown in FIG. 7, the heads 166 and 168 of the two fasteners 135 and 136 are seated on an elongated, metal or plastic mounting plate 170 molded into elastomeric pad 128 with the shanks 171a and 171b of fasteners 136 and 136 extended through apertures 171c and 171d in plate 170 (see FIG. 7). Plate 170 is employed because the elastomeric pad material is too soft to support screw heads 166 and 168. The screw heads would simply tear through the material as screws 135 and 136 were tightened, or, if they did not, the elasticity of the material would make it impossible to effect an unyielding connection between accessory 120 and gunstock 124; and the accessory would not function effectively, if at all. By using the mounting plate 170 and so positioning it in pad 128 that the plate butts against the butt end 122 of gunstock 124 (FIG. 7), the wanted rigid connection is made, while leaving pad 128 free to perform its vibration decay pattern modifying and cushioning functions.

[0065] Accessory 190 has a rigid plate 192, decay pattern modifiers 194 and 196, and an elastomeric pad 198, all of the character discussed above in conjunction with FIGS. 1-3 and 6-9. This accessory also has a boot or sleeve 200 adhesively bonded or otherwise fixed to plate 192 on the side of that component opposite elastomeric pad 198.

[0066] Rather than being fastened to gunstock 202 with screws as in the previously described embodiments of the present invention, accessory 190 is installed by first stretching boot 200 as suggested by phantom line 201 in FIG. 13 and then sliding the butt end 202 of the gunstock into the open end 204 of the boot 202 as shown by arrow 206. The assembled accessory 190 and gunstock 202 are shown in FIG. 14.

EXHIBIT "B"
STEVEN C. SIMS
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AS AMENDED SPECIFICATION PARAGRAPHS 0035, 0042, 0043,
0045, 0051, 0058, 0065 AND 0066

[0035] The butt plate 30 of accessory 24 has a flat base 46 which fits against the butt end 26 of gunstock 28, an integral side wall 49 extending around the periphery of base 48 and oriented at a right angle to that element, and a rim 50 which is integral with side wall 49 and extends around the periphery of the side wall at the edge thereof opposite the base.

[0042] The stems 68 and 70 of decay pattern modifiers 34 and 36 are then attached by the adhesive on the exposed sides of tabs 38 and 40. With the components 34 and 36 of accessory 24 assembled to butt plate 30, the heads 64 65 and 66 of those components fit in recesses 80 and 82. These recesses are formed in elastomeric accessory component 32 and open onto the surface 84 of that component.

[0043] The stems 68 and 70 of vibration decay pattern modifiers 34 and 36 can vibrate in directions generally normal to their longitudinal axes 80 and 82 (see arrows 85a and 85b, FIG. 3A) in any and all directions around the circumferences of the stems. At the same time, the peripheral edges 89 and 90 of decay pattern modifiers 34 and 36 can vibrate at loci around the circumferences of decay pattern modifier heads 65 and 66 in directions generally paralleling axis 86 and 88 (see arrows 90a and 90b, FIG. 3A). These several degrees of freedom of movement materially contribute to the effectiveness of accessory 24 in modifying the decay pattern of the shock vibration set up when gun 22 is fired as does the material from which the decay pattern modifiers are fabricated.

[0045] Accessory 24 is assembled by first adhesively attaching shock vibration decay pattern modifiers 34 and 36 to accessory base plate 30 as described above. Next, the elastomeric pad component 32 of accessory 24 is assembled to base plate 30 with ledge 53 of the latter resting on rim 50 of the base plate, element 50 of the pad fitted in and surrounded by, side wall 52 of the base plate, the decay pattern modifying components 34 and 36 extending into elastomeric pad cavities 72 and 74, and the peripheral portions of the pad 32 and base plate 30 bonded together around their peripheral edges 89 and 90 by adhesive 92 (see FIG. 3). With this step completed, wall 46 of base plate 30 seals and isolates cavities 80 and 82.

[0051] A second recoil reducing accessory for firearms is depicted in FIGS. 6-9 and identified by reference character 120. Like the accessory 24 described

above, recoil reducer 120 has a rigid butt plate, an elastomeric pad, and mushroom-shaped, shock vibration decay pattern modifiers. This accessory is fixed to the butt end 122 of gunstock 124 by threaded fasteners. The butt plate is identified by reference character 126, the elastomeric pad by reference character 128, the shock vibration decay pattern modifiers by reference characters 130 and 132, and the threaded fasteners by reference characters 134.

[0058] The holes in gunstock 124 into which the fasteners are threaded are identified by reference characters 162 and 164. As shown in FIG. 7, the heads 166 and 168 of the two fasteners 135 and 136 are seated on an elongated, metal or plastic mounting plate 170 molded into elastomeric pad 128 with the shanks 171a and 171b of fasteners 136 and 136 extended through apertures 171c and 171d in plate 170 (see FIG. 7). Plate 170 is employed because the elastomeric pad material is too soft to support screw heads 166 and 168. The screw heads would simply tear through the material as screws 135 and 136 were tightened, or, if they did not, the elasticity of the material would make it impossible to effect an unyielding connection between accessory 120 and gunstock 124; and the accessory would not function effectively, if at all. By using the mounting plate 170 and so positioning it in pad 128 that the plate butts against the butt end 122 of gunstock 124 (FIG. 7), the wanted rigid connection is made, while leaving pad 128 free to perform its vibration decay pattern modifying and cushioning functions.

[0065] Accessory 190 has a rigid plate 192, decay pattern modifiers 194 and 196, and an elastomeric pad 198, all of the character discussed above in conjunction with FIGS. 1-3 and 6-9. This accessory also has a boot or sleeve 200 adhesively bonded or otherwise fixed to plate 192 on the side of that component opposite elastomeric pad 198.

[0066] Rather than being fastened to gunstock 202 with screws as in the previously described embodiments of the present invention, accessory 190 is installed by first stretching boot 200 as suggested by phantom line 201 in FIG. 13 and then sliding the butt end 200 of the gunstock into the open end 204 of the boot 202 as shown by arrow 206. The assembled accessory 190 and gunstock 203 are shown in FIG. 14.